Chapter 8
How do Forest Markets Work? Exploring a Practice Perspective

Marjanke A. Hoogstra-Klein

> Practice has a logic which is not that of the logician (Bourdieu 1990, p 86).

8.1 Introduction

The growing public concern about deforestation and forest degradation has pressured governments into developing responses to the wide diversity of forestry problems (Stavins 1995). Until recently, the predominant approach to forest protection by governments around the world has been to use 'command-and-control' instruments. The key characteristic of command-and-control regulation is that the regulator specifies what individuals and individual firms can and cannot do, enforced by the threat of penalties for non-compliance (Tollefson 1998). Although these approaches have sometimes been effective, they have also been very costly. At a time when public sectors are facing huge challenges due to budget cuts which limit the possibility of preserving forests (Kroeger and Casey 2007), alternative (cheaper) approaches to protection are clearly attractive.

In recent years, serious attention has been given to 'market governance', i.e., the use of the market mechanism in governance processes and for enhancing forest management and conservation. More reliance on market-based approaches offers two important advantages: (1) they guide the behaviour of private individuals, and (2) they provide mechanisms for sharing the costs of forest management and protection between governmental and non-governmental actors (Landell-Mills 2002). The enthusiasm for market-based approaches has become so great that governments even promote the creation of *new* markets—the development of markets for carbon sequestration being by far the most ambitious to date. Other markets created include those to supply clean water, to protect threatened species, and to avert disruption of forest and watershed functions (Landell-Mills 2002; Wunder 2007).

Several scientists have expressed doubts about this new form of governance, however. Crook and Clapp (1998), for example, warned of the danger of an excessive faith in the ability of markets to efficiently protect forests, 'as they are

B. Arts et al. (eds.), *Forest and Nature Governance*, World Forests 14,
DOI: 10.1007/978-94-007-5113-2_8,

likely to have contradictory, and largely negative, effects' on forests. Arnold and Perez (2001) also expressed their misgivings about markets as a solution to efficiently conserve forests, pointing out in particular the selective nature of market demand and the uneven distribution of resources within forests. Others have also stated that introducing a more market-oriented way of protecting forests inevitably leads to the transition of many subsistence-based use systems to market-oriented production systems, with negative effects such as loss of biodiversity and loss of livelihoods (Bennet and Robinson 2000; Rico-Gray et al. 1990). Moreover, as market prices seldom reflect the 'true' value of the benefits, markets will fail, leading to overexploitation and the disappearance of valuable benefits (Fa et al. 1995; Hansis 1998; Vasquez and Gentry 1989; Witkowski et al. 1994).

Forest markets are considered either to be an efficient solution to sustainability problems in forestry or to have contradictory, negative effects. This difference in view clearly reflects the lack of knowledge on forest markets. As several authors have already stated, only a few scholars seem to really understand how these markets work and how well (or how badly) they operate (Landell-Mills and Porras 2002; Veeman 2002). The problem already arises with the concept of 'market'. Even though one might expect some agreement on the connotation of the word, the reality is that there is a wide range of different conceptualisations across and within different scientific disciplines, especially in economics and sociology (Depeyre and Dumez 2010; Law and Hassard 1999; Rosenbaum 2000). This being so, how should one go about analysing and evaluating forest markets?

A promising, innovative and multidisciplinary approach to analysing forest markets is practice based approach. Practice based approaches have received growing interest within the social sciences in the past two decades (see e.g., Latour, 1987; Schatzki et al. 2001; Wenger 1998). They have also recently been introduced in the study of markets (see e.g.,Andersson et al. 2008; Araujo 2007; Kjellberg and Helgesson 2007a, b). According to Kjellberg and Helgesson (2006), such an approach offers a richer conceptual tool and therefore a better understanding of the market than has hitherto been the case. This chapter reviews attempts by scientists from different disciplines to define the concept of a market and discusses how these conceptualisations are used in forest market research. A revised conceptualisation of markets is proposed based on practice theory that has the potential to enrich our understanding of how forest markets come about and how they work. This will be illustrated by a short analysis of the certified timber market.

8.2 The Evolution of Markets

This section will provide a brief account of the evolution of the market within the different disciplines. It will bring together many of the traditional as well as newer methods and approaches to illustrate the diversity of the concept.

8.2.1 The Origins: The Market as a Location

The term 'market' was introduced into the English language in the twelfth century (or possibly even earlier) and comes from the Latin word *mercatus*, which means 'trade' or 'place to trade'. The word soon acquired three distinct meanings, all related to the locational aspect: (1) a physical marketplace, (2) the gathering at such a place, and (3) the legal right to hold a meeting at a marketplace. The roots of the term as a location where exchanges of a certain commodity take place (Swedberg 1994) can be traced back to ancient Greek, when marketplaces first materialised at the periphery of settlements (Knorr-Cetina 2006).

It is therefore not surprising that some scientists see the market as either a marketplace or a geographical area (Swedberg 1994). Lipsey (1983, p. 69), for instance, defined a market as 'an area over which buyers and sellers negotiate the exchange of a well-defined commodity'. In different studies on forest markets, such as studies on local markets for non-timber forest products, the physical marketplace is still the focus of analysis. The study by Dold and Cocks (2002), for example, describes indigenous medicinal plants traded in medicinal markets around the Eastern Cape in South Africa.

8.2.2 The Market as an Observable Interface Between Sellers and Buyers

In many cases, however, the area in question is now apparently much larger than the square around the church or the site of a fair (Rosenbaum 2000). One example is the market for forest carbon storage, which is not limited to a geographical area. It is therefore not surprising that in many definitions of market the locational aspect is lost; markets are then only considered to be an interface between sellers and buyers. Jevons (1871, quoted in Hodgson 1988, p. 173), for example, defined the market as 'any body of persons who are in intimate business relations and carry on extensive transactions in any commodity'. However, at the core of this definition remains the market as something that can be observed (i.e., an exchange is taking place). An example of this aspect of the markets can be found in the study by Hart (1978), who described the transition of a group of net-hunting Mbuti (a nomadic society of the Ituri Forest of Zaire[1]) from subsistence to market hunting. The central elements are the material and non-material exchanges, with relationships that differ over time.

[1] The name of the present Democratic Republic of the Congo between 27 October 1971 and 17 May 1997.

8.2.3 The Market as an Abstract Concept of Exchange

With the expanded space of international trade, the long chains of supply and circulation and the multiplicity of intermediaries (Knorr-Cetina 2006), the direct observational exchange of commodities also lost their meaning. Several scientists therefore abandoned this observational definition and instead focused on what the market *does* rather than on what the market *is*: the function of the market (Rosenbaum 2000). Most prominent in this respect is the neoclassical economics perspective. In neoclassical economics, which dominates the literature on markets, the market is an abstract concept describing how goods, resources and services are efficiently allocated. This efficient allocation is driven by the basic forces of demand and supply. Demand refers to how much (in terms of quantity) of a resource is desired by buyers, i.e., the amount of a resource people are willing to buy at a certain price. The relationship between price and quantity demanded is known as the demand relationship. It is considered to be simple: the higher the price, the lower the quantity. Supply represents how much the market can offer. The quantity supplied refers to the amount of a certain good producers are willing to supply for a certain price. This relationship is an upward slope: producers supply more at higher prices as then their profits are higher.

The relationship between demand and supply determines the allocation of resources. When supply and demand are equal (i.e., when the supply function and demand function intersect) the market is said to be at equilibrium. At this point, the allocation of goods is at its most efficient because the amount of goods being supplied is exactly the same as the amount of goods being demanded. Thus, everyone (individuals, firms, or countries) is satisfied with the current economic condition. At the equilibrium price, suppliers sell all the goods they have produced and consumers get all the goods they demand. If the price rises above the equilibrium price, then supply will be greater than demand and therefore there will be too much supply. Producers may then reduce the price and supply to encourage more demand and eliminate the surplus. If the price is below the equilibrium price, demand will be greater than the supply and there will be a shortage. Producers can then raise the price and supply more. The price rise will depress demand and the shortage will disappear. Thus price and quantity fluctuate until there is neither a surplus nor a shortage (i.e. until supply equals demand). Changes in the conditions of demand or supply will shift the demand or supply curves, which will cause changes in the equilibrium price and quantity in the market.

The neoclassical perspective is also prominent in the literature on forest markets. Most forestry economics handbooks (such as the one by (Pearse 1990)) contain an explanation of markets as allocation mechanisms. Such an explanation was recently used in a study by (Trømborg and Solberg 2010) to calculate the consequences of changes in supply and demand on the market for forest biomass.

8.2.4 Markets as Institutional Arrangements

In recent decades, various forest scientists have criticised this abstract view on the market. Mantau (1981), for example, stated that the neoclassical model fails to describe the reality of markets, as it ignores psychological and sociological determinants. After analysing different studies on timber markets, both Borowski (1996) and Lückge (2000) also concluded that the neoclassical model is inadequate to describe markets and their development, as it ignores the social aspects. These critiques of the neoclassical market model in forestry coincided with critiques of the classical market model by scientists from other disciplines (Keister 2002). For example, Granovetter (1985, p. 495) stated that 'the anonymous market of neoclassical models is virtually non-existent in economic life'. White (1981) even wrote that a neoclassical theory of the market does not exist; it is only a pure theory of exchange.

Two important lines of research within economics that distance themselves from at least some of the premises of the neoclassical model of the market are information economics and new institutional economics (Beckert 2008). Both approaches consider markets as institutional arrangements that make exchange possible.

In the neoclassical view on the market, market actors have perfect knowledge.[2] In informational economics, however, the focus is on informational asymmetry between the market actors. A classic paper in this field is Akerlof's (1970) 'The Market for Lemons'. In this article, he used the market for used cars as an example to illustrate how the difference between knowledge of the seller and the potential buyer leads to market failure. In his example, he distinguished between good used cars (which he called 'cherries') and defective used cars (called 'lemons'). The difference is the result of several not-always-traceable variables, such as the owner's driving style, quality and frequency of maintenance and accident history. The potential buyer of a used car knows less about how good or how bad the car for sale is than the seller. He therefore also knows that there is a probability that he will buy a lemon. The price he is willing to pay is therefore less than he would pay if he were certain that he was buying a cherry. This lower price may result in owners of good cars not selling them. In such situations, it is impossible for an efficient market to develop and thus market failure ensues. A solution to this problem is the introduction of safeguarding institutions, such as guarantees on used cars, which reduce the risk to buyers of buying a 'lemon' and increase their willingness to purchase. In this case the market is less efficient than it would be if all parties had the same information, but at least markets can exist.

[2] Although the fundamental theorems of neoclassical economics assume market actors have perfect knowledge, in some cases more sophisticated models of markets are developed, in which actors are not necessarily perfectly informed. Even in these cases the results are dependent on conditions of perfect knowledge: where there is imperfect knowledge, the models assume some departure from optimality.

Several forest scientists draw a parallel between forestry markets and Akerlof's market for 'lemons'. Rametsteiner (2002) and Costa and Ibanez (2007), for example, explain certification as a way to remedy informational asymmetry: as consumers cannot differentiate sustainable forest management from regular forest management, forest certification should be considered as an attribute of reliability for consumers who lack the required knowledge. Nunes and Riyanto (2005) even state that the presence of an informational problem is in fact the cornerstone of any certification and ecolabelling policy instrument.

New institutional economics takes a more radical point of view than information economics. It assumes that factors like incomplete information, limited mental capacity of market actors to process information, and lack of trust lead to uncertainty. This might be the cause of market failure. Institutions enable the stabilisation of market actors' expectations by guarding against possible negative consequences (such as antitrust laws), thus helping to make markets possible (Beckert 2007). The institutions that are developed are the ones that serve the interests of the market actors. Market actors want to reduce this uncertainty before becoming involved in an exchange, and to do so they have to incur costs. These costs are called transaction costs. Actors will tend to organise an exchange so as to minimise transaction costs. The main kinds of transaction costs are:

- search and information costs—the costs of finding out what products are on offer, whether the required product is available on the market, and which of the sellers offers the lowest price, etc.;
- negotiation costs—the costs of coming to an acceptable agreement with the other party to the transaction, drawing up an appropriate contract, etc.;
- enforcement costs—the costs of making sure the other party adheres to the terms of the contract, and of taking appropriate action (often through the legal system) if this turns out not to be the case.

The new institutional economics' approach to forest markets has received considerable attention in the forest literature. Arts and Kerwer (2007), for example, referred in their analysis of timber certification to certification as a regulatory mechanism to reduce search costs. Other examples are Benneker (2008), who explained the performance of community forest enterprises by investigating their market transaction costs, and Galik and Jackson (2009), who found that small private forest holdings do not supply forest carbon offsets because of the high transaction costs.

8.2.5 A Sociology of Markets

Both informational economics and new institutional economics emphasise the importance of institutional regulatory mechanisms for the very existence of markets. In both cases the emergence of institutional regulations is explained in terms of the interests of the participating actors, which means that they retain the

individualist ontology of markets (Beckert 2007). Such an individualistic view is rejected in the sociology of markets, a field that has received considerable attention in recent decades (Fligstein and Dauter 2007). Although there is a great deal of agreement that markets are social structures characterised by extensive social relations between different market actors, different perspectives have emerged at the theoretical level (Dobbin 2004; Fligstein and Dauter 2007). These perspectives are often divided into three theory groups on the basis of the mechanisms that explain the emergence and ongoing dynamics of markets: (1) the networks approach, (2) the institutional approach, and (3) the performativity approach (Fligstein and Dauter 2007).

The networks approach focuses on social relations as a determining factor of market action. Emphasis is placed on how economic activity comes to be coordinated by groups of people instead of being carried out by individuals (Granovetter 1992). In other words, it focuses on the structures of the social relations and the positions the individual market actors hold within these market structures (Granovetter 1985; White 2001). Often, a division is made between horizontal and vertical relations. Analysis of the horizontal (or non-hierarchical) relations often leads to discussions on aspects such as 'trust' and 'solidarity', which promote cooperation among actors cooperation. For the analysis of the vertical (hierarchical) relations the topic of 'power' is central (Granovetter and Swedberg 2001). The networks perspective has received some attention in connection with forest markets. Recently, Murphy and Lawhon (2011), for example, studied the possibility of trusting partnerships in Bolivia's forest products sector. In a study of small-scale private forest owners in Bavaria (Germany), Schlüter and Koch (2009) found that trust among the people within the network was hugely important.

The institutional approach in sociology focuses on the way exchange is determined by institutional settings (e.g. Fligstein 1990). But in contrast to the new institutional economics view on markets, market actors play only a limited role in this approach. They are incorporated as actors trying to change the structures within which they have to function in an attempt to enhance their market position. However, these structures are the result of a historical development (the evolution of a specific market) and are considered far too complex to be directly steered by individual actors (Beckert 2002). An example of a study on forest markets using this approach is McNichol's (2000) study analysing British efforts to set up new markets for NGO-certified sustainable wood products.

The third group focuses on performativity. Performativity is a concept that primarily expresses the idea that phenomena (such as markets) exist only through the processes of creating them; nothing exists without being continually performed. Markets are usually presented as a mysterious force which specific enterprises and individuals have no means of affecting. Seeing markets in a performative manner, however, means that they consist of and are constantly performed by actors (Kortelainen 2008). The performativity perspective has received only limited attention in the literature on forest markets, an exception being the research of Kortelainen (2008). In his research on green markets in the Russian forest sector, he showed that these markets did not come about and develop

through the demand for green products, but were (and still are) performed by a diversified group of actors, including environmental NGOs, publishing companies, certification agencies, market researchers and critical citizens.

8.2.6 And Now, How Further?

The fact that so many different definitions of markets exist can in part be explained by the purpose for which each definition has been introduced; certain situations might require only a narrow definition of a market. On the other hand, a focus on only one dimension may stand in the way of gaining an overall view on the functioning of markets. This is exactly what the different examples teach us: the market is many things at once. It is complex, multifaceted and sometimes even paradoxical. Understanding the functioning of markets therefore asks for an approach which is not limited to a certain theoretical perspective, as in the predominantly disciplinary studies on markets carried out so far (e.g. economics, sociology), but which crosses disciplinary boundaries. Such a promising, innovative and multidisciplinary way to analyse forest markets can be found in exploring markets as *practices*. In response to the strong call for a practice based approach from different social scientists (e.g. Bourdieu 1977; De Certeau 1984; Giddens 1984; Schatzki et al. 2001), in recent years a number of scientists working on markets and marketing have proposed using a practice based approach to explain the functioning of markets too (e.g. Araujo et al. 2008; Kjellberg and Helgesson 2007a, b; Smith 2007a, b).

8.3 Towards a New Approach: Markets as Practices

This section explores the 'markets as practices' approach. To get a clear idea what is meant by such an approach, first the question of what practices are will be dealt with. Subsequently the question how markets can be considered to be specific types of practices will be discussed. Finally, it will be shown how this conceptualisation of market relates to the disciplinary views on markets described above.

8.3.1 What are Practices?

Although the term 'practice' is used frequently, no unifying theory exists. A growing number of researchers from several fields, such as organisation studies, sociology, anthropology, philosophy, and science and technology studies have developed and adopted a range of different practice approaches. What they all have in common is that they place practices at the centre of understanding social

phenomena. Giddens (1984) was one of the social scientists who argued that the social 'is neither the experience of the individual actor, nor the existence of any form of social totality, but social practices ordered across space and time'. In other words, a practice approach stands in opposition to both the individualistic view, in which society is explained as the result of the actions of individual agents (as, for example, is the case in economics), and the structured view, in which society is understood as the result of underlying institutions (as, for example, is the case in sociology).

What then are practices? Practices are based on the idea that in the continual flow of activities it is possible to identify clusters or blocks of activities that can be conceived of as entities (Røpke 2009). According to Schatzki (2002), a practice is an organised constellation of actions—an integral bundle of activities—a set of interconnected doings and sayings. In other words, an organised set of actions is considered to be a practice when it is discernible across time and space: a relatively enduring, relatively recognisable entity (Shove et al. 2007). Some practice scholars consider the focus on 'only doings and sayings' as too limited. Orlikowski (2007, p. 1436), for example, states that there is an 'absence of any considered treatment or theorising of the material artefacts, bodies, arrangements, and infrastructures through which practices are performed'. As Reckwitz (2002, p. 253) argues: 'Carrying out a practice very often means using particular things in a certain way. It might sound trivial to stress that in order to play football we need a ball and goals as indispensable "resources"… but it is not'. Reckwitz (2002, p. 249) therefore defines practices as a routinized type of behavior which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge. A practice—a way of cooking, of consuming, of working, of investigating, of taking care of oneself or of others, etc.—forms so to speak a "block" whose existence necessarily depends on the existence and specific interconnectedness of these elements, and which cannot be reduced to one of these elements'.

Practices are thus coordinated entities; but they require performance for their existence. To make the distinction between the entity and the enactment clear, Schatzki (2002) applies two different notions of practice: practice as a coordinated entity (in the following: practice-as-entity) and practice as performance (in the following: practice-as-performance). The first notion is of 'practice as a temporally unfolding and spatially dispersed nexus of doings and sayings. Examples are cooking practices, voting practices, industrial practices, recreational practices, and correctional practices' (Schatzki 1996, p. 89). The second notion, practice-as-performance, refers to the carrying out of practices, the performing of the doings and sayings which 'actualizes and sustains practices in the sense of nexuses' (Schatzki 1996, p. 90). Coordinated entities can therefore only exist when the activities involved are performed by people—more than just a few individuals. As Reckwitz (2002, p. 249) put it: 'a practice represents a pattern which can be filled out by a multitude of single and often unique actions reproducing the practice'. Individuals face practices-as-entities, as these are formed historically as a

collective achievement. Through their own practice-as-performance, individuals reproduce and transform the entities over time. Individuals thus act as 'carriers' of practices (Røpke 2009). In fact, individuals are the carriers of many different practices at the same time; at any time, an individual actor can engage in different practices. Practices are also not singular and unitary, but multiple (Sandberg and Dall'Alba 2009). Practices such as cooking and voting vary considerably between regions, countries and cultural contexts.

8.3.2 Markets as Practices

During the last 10 years, several scientists have been developing thinking about markets as practices. An analysis of the literature on markets and practices suggests that at this moment two different 'streams' can be distinguished. One stream is based on the work of Kjellberg and Helgesson (2006, 2007a, b), Andersson et al. (2008) and Araujo et al. (2008). Inspired by the ideas of Callon (1998) on the sociology of translation, they suggested that markets are performed as actors engage in 'market practices', which is taken to mean all activities that contribute to perform markets. Kjellberg and Helgesson (2006, 2007a, b) developed a conceptual model in which a distinction is made between three types of practices: (1) exchange practices, (2) normalising practices, and (3) representational practices. Exchange practices relate to the concrete activities related to the exchanges of a specific commodity. Representational practices include activities that contribute to depicting markets and/or how they work. Normalising practices are the activities that contribute to establishing guidelines for how a market should be shaped and reshaped or should work, according to a certain actor or group of actors. Kjellberg and Helgesson (2006, 2007a, b) argue that markets can be understood as emergent orders constituted by ongoing exchange, normalising and representational practices, and the interlinked translations between these that involve intermediaries such as rules, tools, measures and measurements.

Kjellberg and Helgesson (2006) have applied this framework in different situations, for example to study the change from full service to self-service in grocery retailing. Their framework has also been used by other scientists. Veal and Mouzas (2008), for example, used the framework to analyse barriers to market formation, and Rohracher (2009) used this model to analyse the reframing of electricity markets as a strategically oriented non-state governance activity of intermediary organisations.

In this approach, all the different elements of the disciplinary definitions of the market can be found. The three practices (exchange, normalising and representational) can be linked to the different disciplinary definitions on almost a one-to-one basis. Take for example the exchange practices. These are the activities that make economic exchange possible and they can be directly linked to the approaches that see the market as 'the exchange of commodities'. Normalising practices are the activities establishing the guidelines on the (re)shaping and/or

operation of markets and can in turn be linked to the 'markets as institutional arrangement' approaches. The representational practices focus more on the processes that shape markets and describe how markets work, which can be linked to the 'sociology of markets' approach. Although these three practices are much more than the 'simple elements' as depicted in the disciplinary definitions and are linked through objects, tools, measures, etc., the different elements are still separated. This means that all the different elements of markets as described in the disciplinary views are combined and linked by elements of the practice approach. However, they are still considered to be separate elements which can be, and have to be, analysed separately. One can question if such an approach really captures what markets are about, i.e. many things at once which may be impossible to separate.

The second stream therefore might offer a more interesting view. In this stream, a practice perspective on markets has been developed by Smith (2007a, b) in which markets are framed as 'evolving social practices'. Smith considers markets themselves as 'unfolding practices' and not—as the aforementioned scholars on markets and practices contend—as consisting of market practices that perform markets. Smith presents markets as social entities in which actors define themselves and their activities by generating shared meaning. Taking a snapshot of a market, one can see that most markets exhibit fairly well-defined notions of their who (the actors involved), what (the commodity that is being exchanged) and how (the way of exchange). These who, what and how factors, however, not only emerge in different ways, but are also not stable givens. 'Participants not only come and go, but their interests and styles change. The same can be said for the items exchanged and the rules governing these exchanges' (Smith 2007a, p. 505).

Smith's practice perspective on markets (2007a, b) goes much further than the practice based approach in which markets are viewed as consisting of; it in fact transcends the discussion of markets as consisting of different elements but sees the market as a social phenomenon to be distinguished from other social phenomena. And this is exactly what a practice perspective is about: a different view and focus on the social than used so far in the social sciences.

8.4 The Certified Timber Market

Given that 'markets as practices' seem to provide an overarching frame for what markets (including forest markets) are and how they come about, a valid question now is how to empirically study them. Although it is not the intention of this chapter to discuss and apply an extensive framework, this section briefly explores whether the key concepts of practices as introduced in Chap. 1—i.e., situated agency, logic of practice, and performativity—could serve as a starting point. One example will be used to illustrate how this might work: the market for certified timber. After discussing this market, some reflections and conclusions will follow.

Certification is a benchmark market instrument for assuring sustainable forest management and legality of timber trade. Global debates on forest certification started already in the 1970s, but for years, countries, institutions and organizations could not agree on a system (Humphreys 2006). Frustrated about this government failure, non-state actors took the lead themselves (Bendell 2000). The discussion was first led by NGOs concerned about the issue of sustainable forest management, and in 1993 resulted in the first certification initiative: the Forest Stewardship Council (FSC). In the wake of FSC, several other forest certification schemes emerged. Most of these later initiatives are now part of the Programme for the Endorsement of Forest Certification (PEFC). Although the certified timber market is relatively new and small, the number of forests certified by either of these two schemes, or by one of the many others, is growing steadily (Guéneau and Tozzi 2008). Today, nearly 350 million ha of forests worldwide are certified, which comes close to 10 % of all forests worldwide (www.fsc.org; www.pefc.com).

Most conventional economic theories assume that markets will emerge when there is a demand for a product. This, however, is *not* the case for certified timber (or for many other products). This market did not come about because of a high demand. Studies have shown that with the exception of a few countries such as the Netherlands, consumer demand for certified timber products is quite low (FAO 2006). Most buyers favour the aesthetic and technical characteristics of timber over environmental arguments (Guéneau and Tozzi 2008). Only the unremitting efforts of a diversified group of actors, including environmental NGOs, certification agencies, forest management owners, timber companies, retailers, scientists and researchers and critical citizens, make the markets for certified timber work. Without these actors actively *performing* the certified timber market, no such market would exist. An interesting example is the sale of certified blackwood timber from Tanzania for making musical instruments in the UK (Salasala 2011; Chap. 6 of this volume). The certification and export of this timber gives forest owners, including communities, an enormous price premium compared to the sale of the conventional timber to the local market: even up to 400 per cent. The demand in the UK, however, is very dependent on NGO campaigns that actively urge musical instrument industries to buy the Tanzanian certified blackwood. Additionally, in Tanzania itself, the implementation of the certification system is very dependent on assistance from NGOs, external donors and sponsors to forest owners and communities. Hence, the demand and supply are actively and continuously created by a set of actors without whom this market could never have existed at all.

That such a certified timber market continues to be performed can be explained by the fact that a relevant group of actors—from industries, to NGOs, to consumers, to retailers—with sufficient critical mass in the timber market is involved and that all these actors strongly agree that timber certification is important. However, the actors who are performing the market do not operate autonomously, because their agency is always situated against an inherited and shared field of practice, in this case the certified timber market (*situated agency*). Such fields, according to Bourdieu (1977, 1990), do exhibit certain logics that have emerged

historically, diffused socially and informed actors to operate in certain ways. A *logic of practice* refers to a limited number of coherent and convenient generative principles that constitute and characterise a practice. In the case of the certified timber market, these generative principles are: (1) sustainable forest management as an overall objective, (2) feasibility of market reform through certification schemes, i.e., through indicators, criteria and verifiers of sustainable timber and through procedures to design and monitor them, (3) independence from governments, but involvement of timber stakeholders, and (4) third-party auditing to independently verify compliance. Of course, the requirements regarding forest management and auditing are *sub*-market specific, i.e., the FSC market has different requirements than the PEFC market, particularly about the specific nature and stringencies of the various indicators, criteria, verifiers and procedures (Rametsteiner and Simula 2003). The above logic of practice drives the certified timber market in specific directions, but is also reflected upon and amended, if deemed necessary, through situated agencies who perform this market and its generative principles.

8.5 Discussion and Conclusion

The practice based approach to markets has not previously been addressed in the forestry literature. This chapter is by no means an attempt to present a complete framework and should be viewed as exploratory. It offers an illustration of how markets may be defined from a practices perspective. What it has shown is that such an approach has the potential to contribute to the study of forest markets in terms of enriching our understanding of how forest markets come about and how they 'work'. The example of certified timber markets specifically showed the relevance of assuming a practice based approach to markets and validates some of the sensitising concepts used in this book. However, it is not a given that a similar approach to the world timber market as a whole, or to specific local forestry markets, would equally confirm the relevance of the approach. Therefore, some further theoretical development of this approach to forest markets is necessary, in order to be able to capture the specificity that characterises these markets and to bring its potential to bear on more 'conventional' forest markets. In order to do so, exploration of literature can take us only so far. In-depth case studies of forest markets are therefore desirable not only in order to better understand market failure and success, but also in order to contribute to the development of a practice based approach in forest and nature governance.

In light of the importance of case studies, 'markets as practices' not only has a theoretical agenda, but also a methodological agenda. As Miettinen et al. (2009) stated, developing a practice based approach means developing not only a theory, but also an empirical approach. So far, however, only the minority of current practice theory has, as Bueger (2011, p. 2) recently stated, 'been practical in the sense of thinking about how to actually conduct practice research'. Bueger (2011) therefore

even advocated using a specific term to signify the importance of methodology: 'praxiography'—the practice of doing practice-theory-driven research. This praxiography is a combination of methodological considerations derived from ethnomethodology, ethnography, activity theory and actor-network theory. In his review of research strategies and research tools in practice research, Bueger (2011) looked at three strategies (investigating site, investigating controversies, and following concepts, objects and technologies) and three different tools (participant observation, the analysis of narratives of practitioners and the analysis of experts). His conclusion is that often the question is not 'either—or', but 'and—and'.

These research strategies resonate with and partly overlap with the methodological principles set out in Chap. 1 in this volume and are promising for researching 'markets as practice'. They prioritise internal logics of specific market practices above general assumptions on how markets should ideally operate (for instance by an abstract law of supply and demand). In addition, they can link markets to places, without equating them with these places; and they can bring to light how different actors, be it forest managers, timber traders, NGOs, or scientists, actively perform the markets that they also describe. Clearly, studying living practices 'here and now' and relating them to their histories and larger social contexts is not easy (Miettinen et al. 2009), but it poses a great challenge for future research on forest and other markets.

References

Akerlof GA (1970) The market for 'lemons': quality uncertainty and the market mechanism. Q J Econ 84:488–500

Andersson P, Aspenberg K, Kjellberg H (2008) The configuration of actors in market practice. Mark Theor 8:67–80

Arnold J-EM, Perez MR (2001) Can non-timber forest products match tropical forest conservation and development objectives? Ecol Econ 39:437–447

Araujo L (2007) Markets, market making and marketing. Mark Theor 7:211–226

Araujo L, Kjellberg H, Spencer R (2008) Market practices and forms: introduction to the special issue. Mark Theor 8:5–14

Arts B, Kerwer D (2007) Beyond legalisation? How global standards work. In: Lehmkuhl D, Brütsch C (eds) Law and legalization in transnational relations. Routledge, London, pp 144–165

Beckert J (2002) Beyond the market: the social foundations of economic efficiency. Princeton University Press, Princeton

Beckert J (2007) The social order of markets. MPIFG discussion paper. Cologne: Max-Planck-Institut für Gesellschaftsforschung

Beckert J (2008) Introduction. Socio-economic review 6:515–516

Bendell J (2000) Working with stakeholder pressure for sustainable development. In: Bendel J (ed.) Terms for endearment: business, NGOs and sustainable development. Greenleaf, Sheffield, pp 14–29

Benneker C (2008) Dealing with the state, the market and NGOs: the impact of institutions on the constitution and performance of community forest enterprises (CFE) in the lowlands of Bolivia. Doctoral thesis. Wageningen University, Wageningen

Bennet EL, Robinson JG (2000) Hunting for sustainability in tropical forests. Columbia University Press, New York
Borowski S (1996) Marketingstrategien von forstbetrieben. Schriften aus dem Institut für Forstökonomie, Band 7, Institut für Forstökonomie der Universität Freiburg, Freiburg
Bourdieu P (1977) Outline of a theory of practice. Cambridge University Press, Cambridge
Bourdieu P (1990) The logic of practice. Cambridge University Press, Cambridge
Bueger C (2011) Praxiography in international relations: methodological implications of the practical turn. Draft paper prepared for presentation at the third conference of the world international studies committee, Porto, Portugal, Aug 2011. Available at: http://www.bueger.info/documents/Praxiography%20in%20International%20Relations.pdf Accessed 8 Nov 2011
Callon M (1998) Introduction: the embeddedness of economic markets in economics. In: Callon M (ed) The laws of the markets. Blackwell, Oxford, pp 1–57 (The sociological review)
Costa S, Ibanez L (2007) Certification of sustainable forest management: differentiation strategies and asymmetric information. Int J Agric Res Governance Ecol 6:393–414
Crook C, Clapp RA (1998) Is market-oriented forest conservation a contradiction in terms? Environ Conserv 25:131–145
De Certeau M (1984) The practice of everyday life. University of California Press, Berkeley
Depeyre C, Dumez H (2010) The role of architectural players on coopetition: the case of the US defense industry. In: Yami S, Castaldo S, Dagnino GB, Le Roy F (eds) Coopetition: winning strategies for the 21st century. Edward Elgar, Cheltenham, pp 124–140
Dobbin F (2004) Introduction: the sociology of the economy. In: Dobbin F (ed) The sociology of the economy. Russell Sage Foundation, New York, pp 1–25
Dold AP, Cocks ML (2002) The trade in medicinal plants in the Eastern Cape Province, South Africa. S Afr J Sci 98:589–597
Fa JE, Juste J, Perez del Val J, Castroviejo J (1995) Impact of market hunting on mammal species in Equatorial Guinea. Conserv Biol 9:1107–1115
FAO (2006) Global forest resources assessment 2005: progress toward sustainable forest management. FAO Forestry Department, FAO Forestry paper 147. FAO, Rome
Fligstein ND (1990) The transformation of the corporate control. Harvard University Press, Harvard
Fligstein ND, Dauter L (2007) The sociology of markets. Ann Rev Sociol 33:105–128
Galik CS, Jackson RB (2009) Risks to forest carbon offset projects in a changing climate. For Ecol For Manag 257:2209–2216
Giddens A (1984) The constitution of society: an outline of the theory of structuration. University of California Press, Berkeley
Granovetter M (1985) Economic action and social structure: the problem of embeddedness. Am J Sociol 91:481–510
Granovetter M (1992) Economic institutions as social constructions: a framework for analysis. Acta Sociologica 35:3–11
Granovetter M, Swedberg R (2001) The sociology of economic life. Westview Press, Boulder
Guéneau S, Tozzi P (2008) Towards the privatization of global forest governance? Int For Rev 10:550–562
Hansis R (1998) A political ecology of picking: Non-timber forest products non-timber forest products in the Pacific Northwest. Hum Ecol 26:67–86
Hart JA (1978) From subsistence to market: a case study of the Mbuti net hunters. Hum Ecol 6(3):325–353
Hodgson GM (1988) Economics and institutions: a manifesto for a modern institutional economics. Polity Press and University of Pennsylvania Press, Cambridge and Philadelphia
Humphreys D (2006) Logjam. Deforestation and the crisis of global governance. Earthscan, London
Keister LA (2002) Financial markets, money, and banking. Ann Rev Sociol 28:39–61
Kjellberg H, Helgesson CF (2006) Multiple versions of markets: multiplicity and performativity in market practice. Ind Mark Manage 35:839–855

Kjellberg H, Helgesson CF (2007a) On the nature of markets and their practices. Mark Theor 7:137–162
Kjellberg H, Helgesson CF (2007b) The mode of exchange and shaping of markets: distributor influence in the Swedish post-war food industry. Ind Mark Manage 36:861–878
Knorr-Cetina K (2006) The Market. Theor Cult Soc 23:551–556
Kortelainen J (2008) Performing the green market—creating space: emergence of the green consumer in the Russian woodlands. Environ Plann A 40:1294–1311
Kroeger T, Casey F (2007) An assessment of market-based approaches to providing ecosystem services on agricultural lands. Ecol Econ 64:321–332
Landell-Mills N (2002) Developing markets for forest environmental services: an opportunity for promoting equity while securing efficiency? Phil Trans R Soc Lond A 360:1817–1825
Landell-Mills N, Porras TI (2002) Silver bullet or fools' gold? A global review of markets for forest environmental services and their impact on the poor. Instruments for sustainable private sector forestry series. International institute for environment and development, London
Latour B (1987) Science in action: how to follow scientists and engineers through society. Harvard University Press, Cambridge
Law J, Hassard J (1999) Actor network theory and after. Blackwell, Oxford (Sociological Review)
Lipsey RG (1983) Positive economics. Weidenfeld and Nicolson, London
Lückge, F.J. (2000). Modelle des Angebotsverhaltens deutscher Forstbetriebe—Stand und Perspektiven der Forschung. Allgemeine Forst- und Jagdzeitschrift 1, pp 15–19
Mantau, U. (1981). Rohstoffmarkt Holz: Strukturen, Entwicklungen und Preise in der Bundesrepublik Deutschland. Hochschulverlag, Freiburg
McNichol J (2000) Contesting governance in the global marketplace: a sociological assessment of British efforts to build new markets for NGO-certified sustainable wood products. Working Paper no 2000–06. University of California, Center for Culture, Organization, and Politics
Miettinen R, Samra-Fredericks D, Yanow D (2009) Re-turn to practice: an introductory essay. Organ Stud 30:1309–1327
Murphy JT, Lawhon M (2011) Market intermediaries and rural people in Bolivia's forest products sector: are trusting partnerships possible? Singap J Trop Geogr 32:203–219
Nunes PALD, Riyanto YE (2005) Information as a regulatory instrument to price biodiversity benefits: certification and ecolabeling policy practices. Biodivers Conserv 14:35–52
Orlikowski WJ (2007) Sociomaterial practices: exploring technology at work. Organ Stud 28:1435–1448
Pearse PH (1990) Introduction to forestry economics. University of British Columbia Press, Vancouver
Rametsteiner E (2002) The role of governments in forest certification—a normative analysis based on new institutional economics theories. For Policy Econ 4:163–173
Rametsteiner E, Simula M (2003) Forest certification—an instrument to promote sustainable forest management? J Environ Manage 67:87–98
Reckwitz A (2002) Toward a theory of social practices. Eur J Soc Theor 5:243–263
Rico-Gray V, Garcia-Franco JG, Chemas A, Puch A, Sima P (1990) Species composition, similarity, and structure of Mayan Homegardens in Tixpeual and Tixcacaltuyub, Yucatan, Mexico. Econ Bot 44:470–487
Rohracher H (2009) Intermediaries and the governance of choice: the case of green electricity labelling. Environ Plann 41:2014–2028
Røpke I (2009) Theories of practice—new inspiration for ecological economic studies on consumption. Ecol Econ 68:2490–2497
Rosenbaum EF (2000) What is a market? On the methodology of a contested concept. Rev Soc Econ LVIII:455–482
Sandberg J, Dall'Alba G (2009) Returning to practice anew: a life-world perspective. Organ Stud 30:1349–1368
Schatzki TR (1996) Social practiceSocial practices: a wittgensteinian approach to human activity and the social. Cambridge University Press, Cambridge

Schatzki TR (2002). The site of the social: a philosophical account of the constitution of social life and change. Pennsylvania State University Press, University Park, PA
Schatzki TR, Knorr-Cetina K, Von Savigny E (2001) The practice turn in contemporary theory. Routledge, New York
Schlüter A, Koch M (2009) Institutional change in the forest sector: trust and mental models. Eur J For Res 3:383–393
Shove E, Watson M, Hand M, Ingram J (2007) The design of everyday life. Berg, Oxford
Smith CW (2007a) Continuities in markets as definitional practices: A response to Aspers, Knorr Cetina, and Prus. Can J Sociol 32:503–510
Smith CW (2007b) Markets as definitional practices. Can J Sociol 32:1–39
Stavins RN (1995) Transaction costs and tradeable permits. J Environ Econ Mange 29:133–148
Swedberg R (1994) Markets as social structures. In: Smelser NJ, Swedberg R (eds) The handbook of economic sociology. Princeton University Press, Princeton, pp 255–282
Tollefson C (1998) The wealth of forests: Markets, regulation, and sustainable forestry. UBC Press, Vancouver
Trømborg E, Solberg B (2010) Forest sector impacts of the increased use of wood in energy production in Norway. For Policy Econ 12:39–47
Vasquez R, Gentry AH (1989) Use and misuse of forest-harvested fruits in the Iquitos area. Conserv Biol 3:350–361
Veal G, Mouzas S (2008) Barriers to market formation. Representing multiplicity in markets—multiple representations of markets. Paper for the 26th IMP conference, University of Budapest, Corvinus. Available at: http://impgroup.org/uploads/papers/7525.pdf. Accessed 8 Nov 2011
Veeman M (2002) Understanding local and regional markets for forest products. In: Campbell BM, Luckert MK (eds) Uncovering the hidden harvest: valuation methods for woodland and forest resources. Earthscan, London, pp 66–102
Wenger E (1998) Communities of practice: learning, meaning, and identity. Cambridge University Press, Cambridge
White HC (1981) Where do markets come from? Am J Sociol 87:517–547
White HC (2001) Markets from networks. Socioeconomic models of production. Princeton University Press, Princeton
Witkowski ETF, Lamont BB, Obbens FJ (1994) Commercial picking of Banksia hookeriana in the wild reduces subsequent shoot, flower and seed production. J Appl Ecol 31:508–520
Wunder S (2007) The efficiency of payments for environmental services in tropical conservation. Conserv Biol 21:48–58